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SUMMARY

Aspiring software engineer with a builder's mindset and deep curiosity for how systems work under the hood. From OCR pipelines to AI-driven resume tools, I pursue projects that solve real problems and make tech more accessible. I thrive in collaborative, fast-moving environments and value clean design, meaningful impact, and lifelong learning.

EDUCATION

XIM University

Aug 2020 – Mar 2024

B.S. - Computer Science and Engineering

Bhubaneswar, India

Relevant Coursework: Data Structures and Algorithms, Software Development Lifecycle, Object Oriented Programming, DBMS, Computer Networking, Web Development, Computer Vision and Image Processing, Operating Systems, Parallel and Distributed Computing, Networking and Security

PROJECTS

CV SCANNER 📄 | *FastAPI, Python, ReactJs, OpenAI API, AWS (EC2, RDS PostgreSQL, VPC, NAT Gateway, Elastic Load Balancer, S3), PostgreSQL, PyMuPDF, nginx python-docx*

- Developed a full-stack **AI-powered** resume optimization platform using **FastAPI**, **ReactJs**, and **AWS**, reducing manual effort of applying to jobs by **70%**.
- Secured authentication and session management using **OAuth2** and **JWT**; deployed with a **3-tier architecture** across **VPC**, **NAT Gateway**, and **RDS PostgreSQL**, ensuring scalability and isolation.
- Implemented intelligent automation for cover letter generation and ATS scoring; hosted on **EC2** with **Auto Scaling Groups (ASG)** and traffic distributed via **Application Load Balancer (ALB)** for high availability.

LINQ 📄 | *Socket.IO, ReactJS, ExpressJS, MongoDB, NodeJS, Mongoose, JWT, Zustand, Docker*

- Deployed **React** frontend using **Nginx** for efficient static file serving, while managing backend API routes with **Node.js** and Docker-based development environments.
- Leveraged **Socket.io** along with the NoSQL database **MongoDB** to build a synchronous and real-time messaging app with personal and group chat capabilities. Integrated basic error handling and optimized message delivery using **event-driven architecture**. Leveraged **Multer** package for image and file sharing.
- Implemented secure user authentication and session management using **JSON Web Tokens (JWT)**. Containerized the application using **Docker** for simplified **deployment** and consistency across environments.

EXPERIENCE

Computer Vision & Medical Imaging

2022 – Feb 2024

Research Associate

XIM University, Bhubaneswar

- * Developed OCR pipeline achieving 95% text extraction accuracy using KerasOCR/EasyOCR integration, enabling accessibility tools for visually impaired through image-to-text conversion. Engineered CNN architectures trained on ICDAR/COCO-TEXT datasets, optimizing multi-orientation text recognition for complex document layouts
- * Conducted large-scale neuroimaging analysis of 3,055 brain MRIs (2,206 PD patients/849 controls) using MATLAB & CAT12, identifying structural biomarkers for early Parkinson's detection. Discovered gender-specific variations in gray matter density through voxel-based morphometry, contributing to personalized PD diagnostic frameworks
- * Automated MRI processing pipeline reduced analysis time by 40% while maintaining 99% data integrity across PPMI dataset specimens

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C++

Frameworks: React, Node.js, Express.js, FastAPI, Flask, Socket.io, Mongoose, Langchain

Databases: SQL, PostgreSQL, MySQL, MongoDB

Cloud & DevOps: AWS (EC2, S3, RDS, DynamoDB), Docker, Kubernetes, Agile, SDLC

Tools: Git, Postman, VS Code, VMware, LLMs

CERTIFICATIONS

• AWS Technical Essentials

AWS, Nov 2023

• The Complete Full-Stack Bootcamp

Udemy, Nov 2024